

## 50 CFR Part 17

**Endangered and Threatened Wildlife and Plants; Proposal to Determine Endangered Status for *Arenaria cumberlandensis***

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** The Service proposes to determine endangered status for *Arenaria cumberlandensis* (Cumberland sandwort). This small plant is known from only five sites, one in Kentucky and four in Tennessee. The species is endangered by timber harvesting, trampling by recreational users of its unique habitat, and destruction of its habitat by collectors of Indian artifacts. This proposal, if made final, would extend the protection of the Endangered Species Act of 1973, as amended, to *A. cumberlandensis*. The Service seeks data and comments from the public.

**DATES:** Comments must be received by September 4, 1987. Public hearing

requests must be received by August 20, 1987.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to the Field Supervisor, Endangered Species Field Office, U.S. Fish and Wildlife Service, 100 Otis Street, Room 224, Asheville, North Carolina 28801. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Mr. Robert R. Currie at the above address (704/259-0321 or FTS 672-0321).

**SUPPLEMENTARY INFORMATION:****Background**

The plant *Arenaria cumberlandensis* (Cumberland sandwort) was described as a new species by Wofford and Kral (1979). This perennial, herbaceous member of the pink family (Caryophyllaceae) is 4 to 6 inches (10 to 15 centimeters) tall, and has small, white-petaled flowers and relatively long, narrow leaves. It is distinguished from a related species, *Arenaria glabra*,

by the presence, at flowering, of basal rosettes of leaves and by its wider and thicker leaves. Additionally, *A. cumberlandensis* flowers in late June and early July, while *A. glabra* flowers in late April and early May (Wofford and Smith 1980).

*Arenaria cumberlandensis* is known only from a limited portion of the Cumberland Plateau in north-central Tennessee and adjacent Kentucky. It is restricted to shady, moist rockhouse floors, overhanging ledges, and solution pockets in sandstone rock faces. Rockhouses were defined by Wofford (1976) as "cave-like overhangs resulting from differential weathering of sandstone." This species occurs where the correct combination of shade, high moisture, cool temperatures, and high humidity provides appropriate habitat conditions. These habitat requirements are in sharp contrast to those of other members of the genus in the southeastern United States, which are typically found in hot, dry areas in full sun (Wofford and Kral 1979, Wofford and Smith 1980). The five currently known populations of *A. cumberlandensis*, one in Kentucky and four in Tennessee, are described below.

1. *McCreary County, Kentucky.*—According to Marc Evans (Kentucky Nature Preserves Commission, personal communication, February 21, 1986), this small population is less than ½ mile from the Tennessee State line. It was discovered by Mr. Max Medley during a thorough search of the area for rare plants. The area is managed by the Daniel Boone National Forest. Threats to the site include habitat destruction by hunters of Indian artifacts, hikers, campers, and other recreational users of the area. Timber removal in or adjacent to the habitat supporting *A. cumberlandensis* would also have significant adverse impacts, by eliminating the shade, high moisture and humidity, and cool temperatures that the species needs. At the present time no timber harvests are planned near this site (Brian Knowles, Daniel Boone National Forest, personal communication, 1986).

2. *Fentress and Morgan Counties, Tennessee.*—The small population here is located on privately owned land on the east and west sides of the Clear Fork River. The river forms a part of the boundary between Fentress and Morgan Counties. The Fentress County portion of the population is under stress because it occurs in an area that is much drier than the habitat in which *A. cumberlandensis* is characteristically found. This was the driest site observed by Wofford and Smith (1980) during

their status survey of the species. Part of the population is potentially threatened through trampling by hikers and campers, while all of it is vulnerable to adverse habitat modification by timber harvesting.

3. *Pickett County, Tennessee*.—This site, located within Pickett State Park and Forest, is owned by the State of Tennessee and is managed by the Tennessee Department of Conservation, Division of Forestry. The area supports the largest population of *A. cumberlandensis*, as well as several excellent examples of the unique rockhouse flora known only from the Cumberland Plateau. Existing threats to the species at this site include hiking, camping, picnicking, rappelling, and other recreational use of the area. A potential threat is any timber removal not giving primary consideration to the conservation of *A. cumberlandensis* (Tennessee) Department of Conservation 1979, Wofford and Smith 1980).

4. *Fentress County, Tennessee*.—The very small population here contains fewer than six clumps of plants and is located within the watershed of a municipal water supply reservoir. At the present time the only known threat is this population's small size and its consequent vulnerability to extirpation by natural population fluctuations (Wofford and Smith 1980).

5. *Scott County, Tennessee*.—This small population is within the boundaries of the Big South Fork National River and Recreation Area and is managed by the National Park Service. The population is small, consisting of approximately 50 clumps. The site has been severely impacted through trampling by recreational visitors to the area, by collectors of Indian artifacts, and by trash dumping (Wofford and Smith 1980). The National Park Service has now been made aware of the presence of *A. cumberlandensis*, has indicated strong support for listing, and has stated that it will take measures to protect the species.

The Service funded a status survey of *A. cumberlandensis* in 1979 and received the final report in October 1980. Based on this report, the species was included in category 1 of a comprehensive plant notice of review in the Federal Register of December 15, 1980 (45 FR 82480), and in an updated notice in the Federal Register of September 27, 1985 (50 FR 39526). Category 1 comprises those species for which the Service has current information supporting proposed endangered or threatened status.

All plants covered by the comprehensive plant notices, such as *A.*

*cumberlandensis*, are treated as being under petition. Section 4(b)(3)(B) of the Endangered Species Act of 1973, as amended in 1982, requires certain findings on pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 Amendments further requires that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. On October 13, 1983, October 12, 1984, and October 11, 1985, the Service found that the petitioned listing of *A. cumberlandensis* was warranted but precluded by other listing actions of a higher priority, and that additional data on vulnerability and threats were still being gathered. These other listing measures now have been dealt with, and all necessary information has been assembled. Another finding was due by October 11, 1986, and that finding, to the effect that the petitioned listing of *A. cumberlandensis* is warranted, is incorporated in this proposed rule.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal Lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Arenaria cumberlandensis* Wofford and Kral (Cumberland sandwort) are as follows:

##### *A. The present or threatened destruction, modification, or curtailment of its habitat or range*

*A. cumberlandensis* is endangered directly and indirectly by human activities in and adjacent to its unique habitat. The species is found on the sandy floors of rockhouses, in solution pockets on the face of sandstone cliffs, and on ledges beneath overhanging sandstone. Significant threats to the plants growing on the rockhouse floors include trampling by hikers, campers, picknickers, individuals rappelling down the sandstone cliffs, and "pot hunters" digging within the rockhouses for American Indian artifacts. The plants growing on ledges and in solution pockets on the cliff faces are vulnerable to trampling by those rappelling down the cliffs. All populations are potentially threatened by timber removal in or adjacent to the sites supporting the species. Increased sunlight on the plants and subsequent alteration of the moisture conditions would probably

lead to extirpation of *A. cumberlandensis* from the timbered area.

##### *B. Overutilization for commercial, recreational, scientific, or educational purposes*

*A. cumberlandensis* is not currently a component of the commercial trade in native plants. Its small size and restrictive habitat requirements should limit future demands resulting from increased publicity of the species to a few wild flower enthusiasts specializing in rare species. However, several of the known populations are very small and could be significantly damaged or extirpated by scientific collecting. The adverse impacts of some recreational activities have been addressed above.

##### *C. Disease or predation*

Not known to be a problem.

##### *D. The inadequacy of existing regulatory mechanisms*

*A. cumberlandensis* is listed as an endangered species on Tennessee's unofficial list of endangered, threatened, and rare plant species. The recently enacted Tennessee Rare Plant Protection and Conservation Act will prohibit taking without the permission of the landowner and will require that any commercial activity involving the species be authorized by permit. The species will be listed as an endangered species on the unofficial list of endangered, threatened, and rare species currently being revised by a review committee of the Kentucky Academy of Science. No protection is afforded the species by inclusion on this unofficial list. Existing regulatory mechanisms and unofficial recognition given to the species do not provide protection from habitat alteration and destruction, which are the primary threats to the continued existence of *A. cumberlandensis*.

##### *E. Other natural or manmade factors affecting its continued existence.*

*A. cumberlandensis* is an extremely rare species found only in a small part of the Cumberland Plateau. In some populations, loss of even a few individuals through natural fluctuations in numbers or human-induced habitat alterations could eliminate the populations and thereby appreciably reduce the likelihood that the species will continue to exist.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this

rule. Based on this evaluation, the preferred action is to list *A. cumberlandensis* as an endangered species. Endangered status seems appropriate because of the severity of problems facing the species throughout its range. Critical habitat is not being designated for the reasons discussed below.

### Critical Habitat

Section 4(a)(3) of the Act, as amended, requires designation, to the maximum extent prudent and determinable, of any habitat of a species that is considered to be critical habitat, at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for *A. cumberlandensis* at this time. Most populations of this species are very small, and loss of even a few individuals, to activities such as collection for scientific purposes, could extirpate the species from some of the sites where it is found. Collecting, without permits, would be prohibited at the two sites under Federal management; however, collecting restrictions would be difficult to enforce at these sites and would not be applicable, under the Act, to the other sites, which are not federally owned. Therefore, publication of critical habitat descriptions and maps would increase the vulnerability of the species, without significantly increasing protection. The owners and managers of all the known populations of *A. cumberlandensis* are aware of the plant's location and of the importance of protecting the plant and its habitat. No additional benefits would result from a determination of critical habitat.

### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species

that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402. Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. If a species is subsequently listed, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Three of the five known populations of *A. cumberlandensis* are on private, municipal, or State-owned land. One small population is located on land managed by the National Park Service, while another is on land managed by the U.S. Forest Service. There are no current or planned Federal activities that are anticipated to adversely impact this species. The Forest Service has been contacted and has agreed not to allow logging in the area occupied by *A. cumberlandensis*. The Park Service has indicated it will take measures to protect the species.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions that apply to all endangered plants. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export any endangered plant, transport it in interstate or foreign commerce in the course of a commercial activity, sell or offer it for sale in interstate or foreign commerce, or remove it from areas under Federal jurisdiction and reduce it to possession. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued for *A. cumberlandensis*, since it is not common in cultivation or in the wild. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, 6th Floor, Broyhill Building, U.S. Fish and Wildlife

Service, Washington, DC 20240 (703/235-1903).

### Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning any aspect of this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *A. cumberlandensis*;

(2) The location of any additional populations of this species and the reasons why any habitat should or should not be determined to be critical habitat as provided by Section 4 of the Act;

(3) Additional information concerning the range and distribution of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulation on *A. cumberlandensis* will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Field Supervisor, Endangered Species Field Office (see "ADDRESSES" section).

### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

### References Cited

- Tennessee Department of Conservation. 1979. Summary Status Report—*Arenaria cumberlandensis*. Unpublished report, 2 pp.
- Wofford, B.E. 1976. The Taxonomic Status of *Ageratina luciae-brauniae*

(Fern.) King and H. Robins. *Phytologia* 33(6):369-370.

Wofford, B.E., and R. Kral. 1979. A new *Arenaria* (Caryophyllaceae) from the Cumberlands of Tennessee. *Brittonia* 31(2):257-260.

Wofford, B.E., and D.K. Smith. 1980. Status Report on *Arenaria cumberlandensis*. Unpublished report prepared under contract to the Southeast Region, U.S. Fish and Wildlife Service, 22 pp.

#### Author

The primary author of this proposed rule is Mr. Robert R. Currie, Endangered Species Field Office, U.S. Fish and

Wildlife Service, 100 Otis Street, Room 224, Asheville, North Carolina 28801, (704) 59-0321 or FTS 672-032.

#### List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

#### Proposed Regulation Promulgation

#### PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411; (16 U.S.C. 1531 *et seq.*).

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical order under the family Caryophyllaceae, to the List of Endangered and Threatened Plants:

#### § 17.12 Endangered and threatened plants.

(h) . . .

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Caryophyllaceae—Pink family.						
<i>Arenaria cumberlandensis</i>	Cumberland sandwort	U.S.A. (KY, TN)	E		NA	NA

Susan Rocca,

Acting Assistant Secretary for Fish and Wildlife and Parks.

Dated: June 19, 1987.

[FR Doc. 87-15183 Filed 7-2-87; 8:45 a.m.]

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